

**BEFORE THE DEPARTMENT OF
NATURAL RESOURCES AND CONSERVATION
OF THE STATE OF MONTANA**

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APPLICATION FOR BENEFICIAL WATER USE PERMIT NO 42M 30159885 BY RICHLAND COUNTY PUBLIC WORKS)))	PRELIMINARY DETERMINATION TO GRANT PERMIT
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On March 20, 2023, Richland County Public Works (Applicant) submitted Application for Beneficial Water Use Permit No. 42M 30159885 to the Glasgow Regional Water Resources Office of the Department of Natural Resources and Conservation (Department or DNRC) for 250 GPM and 40.1 AF per year for municipal purpose. The Department published receipt of the Application on its website. The Department held a pre-application meeting with the Applicant's consultant on March 7, 2023. The Department sent Applicant a deficiency letter under § 85-2-302, Montana Code Annotated (MCA), dated April 10, 2023. The Applicant responded with information dated May 25, 2023. Additional information was submitted on June 2, 2023. The Application was determined to be correct and complete as of August 2, 2023. An Environmental Assessment for this Application was completed on August 3, 2023.

INFORMATION

The Department considered the following information submitted by the Applicant, which is contained in the administrative record.

Application as filed:

- Application for Beneficial Water Use Permit, Form 600-GW
- Maps: Aerial photos dated 2/20/2023 depicting the point of diversion and place of use
- Aquifer Testing Addendum
 - Form 633, Aquifer testing data (electronic)
 - Well logs for production and monitoring wells

Information Received after Application Filed

- Deficiency response submitted by Ryan Kopp, consultant, May 25, 2023
- Additional deficiency response emailed by Ryan Kopp, consultant, June 2, 2023
- DNRC memo granting a variance from aquifer testing requirement, 36.12.121(3)(a), (k) dated July 24, 2023

Information within the Department's Possession/Knowledge

- The Department also routinely considers the following information. The following information is not included in the administrative file for this Application but is available upon request. Please contact the Glasgow Regional Office at 406-228-2561 to request copies of the following documents.
 - Flow records for USGS Gage # 06329500, Yellowstone River near Sidney, MT. The period of record is from October, 1910 to March, 2023.
 - Department water right records of existing rights
 - Groundwater Permit Report dated July 24, 2023 by DNRC Groundwater Hydrologist, Melissa Brickl.
 - Department Technical Report dated August 2, 2023.

The Department has fully reviewed and considered the evidence and argument submitted in this Application and preliminarily determines the following pursuant to the Montana Water Use Act (Title 85, chapter 2, part 3, MCA).

PROPOSED APPROPRIATION

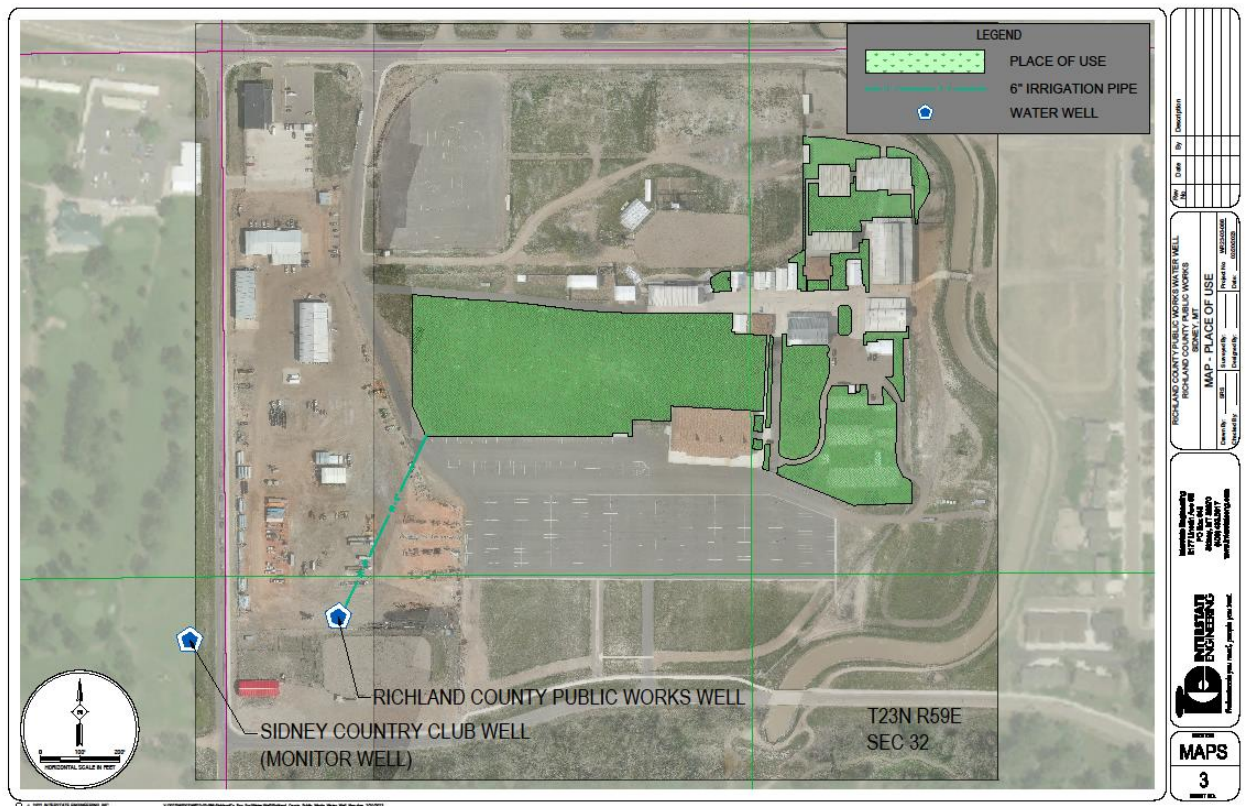
FINDINGS OF FACT

1. The Applicant proposes to divert groundwater by means of a well 120 feet deep completed in the Shallow Hydrologic Unit of the Yellowstone River valley alluvial terrace deposits. The well is located in NWSWNW Section 32, Township (T) 23N, Range (R) 59E, which is at the Richland County Fairground. The Applicant proposes to divert water from January 1 to December 31 at 250 GPM up to 40.1 AF per year. The proposed purpose is municipal use from January 1 to December 31. The proposed municipal use includes irrigation

on 10 acres of grass fields at the Fairground, as well as supplying water for volunteer fire department and county services such as road maintenance and agricultural spraying. Fire department and county vehicles will fill up from two above-ground storage barrels adjacent to the well. The place of use for the proposed appropriation is the Fairground in NW Section 32, T23N, R59E, Richland County.

2. The point of diversion and place of use are approximately 3.3 miles west of the Yellowstone River, in the Lower Yellowstone River Basin 42M. Basin 42M is not subject to any basin closure or controlled groundwater area restriction.

Figure 1: Project location of Permit Application 42M 30159885.



§ 85-2-311, MCA, BENEFICIAL WATER USE PERMIT CRITERIA

GENERAL CONCLUSIONS OF LAW

3. The Montana Constitution expressly recognizes in relevant part that:
 - (1) All existing rights to the use of any waters for any useful or beneficial purpose are hereby recognized and confirmed.
 - (2) The use of all water that is now or may hereafter be appropriated for sale, rent, distribution, or other beneficial use . . . shall be held to be a public use.
 - (3) All surface, underground, flood, and atmospheric waters within the boundaries of the state are the property of the state for the use of its people and are subject to appropriation for beneficial uses as provided by law.

Mont. Const. Art. IX, §3. While the Montana Constitution recognizes the need to protect senior appropriators, it also recognizes a policy to promote the development and use of the waters of the state by the public. This policy is further expressly recognized in the water policy adopted by the Legislature codified at § 85-2-102, MCA, which states in relevant part:

- (1) Pursuant to Article IX of the Montana constitution, the legislature declares that any use of water is a public use and that the waters within the state are the property of the state for the use of its people and are subject to appropriation for beneficial uses as provided in this chapter. . . .
- (3) It is the policy of this state and a purpose of this chapter to encourage the wise use of the state's water resources by making them available for appropriation consistent with this chapter and to provide for the wise utilization, development, and conservation of the waters of the state for the maximum benefit of its people with the least possible degradation of the natural aquatic ecosystems. In pursuit of this policy, the state encourages the development of facilities that store and conserve waters for beneficial use, for the maximization of the use of those waters in Montana . . .

4. Pursuant to § 85-2-302(1), MCA, except as provided in §§ 85-2-306 and 85-2-369, MCA, a person may not appropriate water or commence construction of diversion, impoundment, withdrawal, or related distribution works except by applying for and receiving a permit from the Department. See § 85-2-102(1), MCA. An applicant in a beneficial water use permit proceeding must affirmatively prove all of the applicable criteria in § 85-2-311, MCA. Section § 85-2-311(1) states in relevant part:

... the department shall issue a permit if the applicant proves by a preponderance of evidence that the following criteria are met:

(a) (i) there is water physically available at the proposed point of diversion in the amount that the applicant seeks to appropriate; and

(ii) water can reasonably be considered legally available during the period in which the applicant seeks to appropriate, in the amount requested, based on the records of the department and other evidence provided to the department. Legal availability is determined using an analysis involving the following factors:

(A) identification of physical water availability;

(B) identification of existing legal demands on the source of supply throughout the area of potential impact by the proposed use; and

(C) analysis of the evidence on physical water availability and the existing legal demands, including but not limited to a comparison of the physical water supply at the proposed point of diversion with the existing legal demands on the supply of water.

(b) the water rights of a prior appropriator under an existing water right, a certificate, a permit, or a state water reservation will not be adversely affected. In this subsection (1)(b), adverse effect must be determined based on a consideration of an applicant's plan for the exercise of the permit that demonstrates that the applicant's use of the water will be controlled so the water right of a prior appropriator will be satisfied;

(c) the proposed means of diversion, construction, and operation of the appropriation works are adequate;

(d) the proposed use of water is a beneficial use;

(e) the applicant has a possessory interest or the written consent of the person with the possessory interest in the property where the water is to be put to beneficial use, or if the proposed use has a point of diversion, conveyance, or place of use on national forest system lands, the applicant has any written special use authorization required by federal law to occupy, use, or traverse national forest system lands for the purpose of diversion, impoundment, storage, transportation, withdrawal, use, or distribution of water under the permit;

(f) the water quality of a prior appropriator will not be adversely affected;

(g) the proposed use will be substantially in accordance with the classification of water set for the source of supply pursuant to 75-5-301(1); and

(h) the ability of a discharge permit holder to satisfy effluent limitations of a permit issued in accordance with Title 75, chapter 5, part 4, will not be adversely affected.

(2) The applicant is required to prove that the criteria in subsections (1)(f) through (1)(h) have been met only if a valid objection is filed. A valid objection must contain substantial credible information establishing to the satisfaction of the department that the criteria in subsection (1)(f), (1)(g), or (1)(h), as applicable, may not be met. For the criteria set forth in subsection (1)(g), only the department of environmental quality or a local water quality district established under Title 7, chapter 13, part 45, may file a valid objection.

To meet the preponderance of evidence standard, “the applicant, in addition to other evidence demonstrating that the criteria of subsection (1) have been met, shall submit hydrologic or other

evidence, including but not limited to water supply data, field reports, and other information developed by the applicant, the department, the U.S. geological survey, or the U.S. natural resources conservation service and other specific field studies.” § 85-2-311(5), MCA (emphasis added). The determination of whether an application has satisfied the § 85-2-311, MCA criteria is committed to the discretion of the Department. Bostwick Properties, Inc. v. Montana Dept. of Natural Resources and Conservation, 2009 MT 181, ¶ 21. The Department is required grant a permit only if the § 85-2-311, MCA, criteria are proven by the applicant by a preponderance of the evidence. Id. A preponderance of evidence is “more probably than not.” Hohenlohe v. DNRC, 2010 MT 203, ¶¶33, 35.

5. Pursuant to § 85-2-312, MCA, the Department may condition permits as it deems necessary to meet the statutory criteria:

(1) (a) The department may issue a permit for less than the amount of water requested, but may not issue a permit for more water than is requested or than can be beneficially used without waste for the purpose stated in the application. The department may require modification of plans and specifications for the appropriation or related diversion or construction. The department may issue a permit subject to terms, conditions, restrictions, and limitations it considers necessary to satisfy the criteria listed in 85-2-311 and subject to subsection (1)(b), and it may issue temporary or seasonal permits. A permit must be issued subject to existing rights and any final determination of those rights made under this chapter.

E.g., Montana Power Co. v. Carey (1984), 211 Mont. 91, 96, 685 P.2d 336, 339 (requirement to grant applications as applied for, would result in, “uncontrolled development of a valuable natural resource” which “contradicts the spirit and purpose underlying the Water Use Act.”); see also, *In the Matter of Application for Beneficial Water Use Permit No. 65779-76M by Barbara L. Sowers* (DNRC Final Order 1988)(conditions in stipulations may be included if it further compliance with statutory criteria); *In the Matter of Application for Beneficial Water Use Permit No. 42M-80600 and Application for Change of Appropriation Water Right No. 42M-036242 by Donald H. Wyrick* (DNRC Final Order 1994); Admin. R. Mont. (ARM) 36.12.207.

6. The Montana Supreme Court further recognized in Matter of Beneficial Water Use Permit Numbers 66459-76L, Ciotti: 64988-G76L, Starnes (1996), 278 Mont. 50, 60-61, 923 P.2d 1073, 1079, 1080, *superseded by legislation on another issue*:

Nothing in that section [85-2-313], however, relieves an applicant of his burden to meet the statutory requirements of § 85-2-311, MCA, before DNRC may issue that provisional permit. Instead of resolving doubts in favor of appropriation, the Montana Water Use Act requires an applicant to make explicit statutory showings that there are unappropriated waters in the source of supply, that the water rights of a prior appropriator will not be adversely affected, and that the proposed use will not unreasonably interfere with a planned use for which water has been reserved.

See also, Wesmont Developers v. DNRC, CDV-2009-823, First Judicial District Court,

Memorandum and Order (2011). The Supreme Court likewise explained that:

.... unambiguous language of the legislature promotes the understanding that the Water Use Act was designed to protect senior water rights holders from encroachment by junior appropriators adversely affecting those senior rights.

Montana Power Co., 211 Mont. at 97-98, 685 P.2d at 340; see also Mont. Const. art. IX §3(1).

7. An appropriation, diversion, impoundment, use, restraint, or attempted appropriation, diversion, impoundment, use, or restraint contrary to the provisions of § 85-2-311, MCA is invalid. An officer, agent, agency, or employee of the state may not knowingly permit, aid, or assist in any manner an unauthorized appropriation, diversion, impoundment, use, or other restraint. A person or corporation may not, directly or indirectly, personally or through an agent, officer, or employee, attempt to appropriate, divert, impound, use, or otherwise restrain or control waters within the boundaries of this state except in accordance with this § 85-2-311, MCA. § 85-2-311(6), MCA.

8. The Department may take notice of judicially cognizable facts and generally recognized technical or scientific facts within the Department's specialized knowledge, as specifically identified in this document. ARM 36.12.221(4).

Physical Availability
FINDINGS OF FACT

9. The Applicant provided an Aquifer Testing Addendum and Aquifer Test Data Form (Form 633) in electronic format. A variance of aquifer testing requirements was requested by the Applicant as part of the Aquifer Testing Addendum.

10. The variance was requested because the Applicant did not pump at a constant discharge rate in accordance with Form 633, as required by ARM 36.12.121(3)(a). The Applicant also requested a variance from ARM 36.12.121(3)(k), as drawdown data were collected at one-minute intervals instead of 30-second intervals required during the first ten minutes. DNRC Groundwater Hydrologist, Melissa Brickl, confirmed that she was able to analyze the aquifer properties with the given information provided in Form 633. The variance request was granted on July 24, 2023 by Todd Netto, Regional Manager in Glasgow.

11. The proposed diversion consists of an 8-inch production well completed in the Shallow Hydrologic Unit (SHU) of the Yellowstone River valley alluvial terrace deposits. The total depth of the well is 120 feet with a static water level at 26.1 feet below top of casing. The monitoring well (GWIC ID 36680) required as part of the aquifer test is 358 feet southwest of the production well with total depth of 116 feet and static water level of 25 feet below top of casing. The groundwater level data in both wells were collected with In-Situ Level Troll 700 datalogger, while the discharge was measured with 4-inch Seametrics AG90 Magmeter.

12. Physical groundwater availability was evaluated by calculating groundwater flux through a zone of influence (ZOI), which is determined by the 0.01-foot drawdown contour. A transmissivity (T) value of 7,357 ft²/day was used by the Department to evaluate physical availability. Using Theis (1935) solution, a constant pumping rate of 24.8 GPM for the 365 days in the period of diversion, T= 7,357 ft²/day, and specific yield of 0.1 (Lohman 1972), the 0.01-foot drawdown contour extends 10,100 feet from the Applicant's well. This contour extends past the SHU boundaries; therefore, the radius was truncated west of the Applicant's well to exclude the Fort Union Aquifer. The direction of groundwater flow is predominantly to the southeast and east; as such, the width of the ZOI that is perpendicular to groundwater flow equals 20,200 feet. Aquifer flux (Q) through the ZOI is determined by the equation $Q=TWi$, where

$T = \text{Transmissivity} = 7,357 \text{ ft}^2/\text{day}$

$W = \text{Width of ZOI} = 20,200 \text{ feet}$

$i = \text{Groundwater gradient} = 0.006 \text{ ft/ft}$ (from Patton et al, 1998 Water level contour map)

The calculated aquifer flux through the ZOI is 891,668 ft³/day or 7,471 AF/year.

13. According to the Groundwater Permit Report, the proposed well could experience 20.8 feet of drawdown after the first year, leaving approximately 66.1 ft of available water column above its bottom.

14. The Department finds that water is physically available at the proposed point of diversion in the amount that the Applicant seeks to appropriate.

CONCLUSIONS OF LAW

15. Pursuant to § 85-2-311(1)(a)(i), MCA, an applicant must prove by a preponderance of the evidence that “there is water physically available at the proposed point of diversion in the amount that the applicant seeks to appropriate.”

16. It is the applicant’s burden to produce the required evidence. *In the Matter of Application for Beneficial Water Use Permit No. 27665-41I by Anson* (DNRC Final Order 1987)(applicant produced no flow measurements or any other information to show the availability of water; permit denied); *In the Matter of Application to Change Water Right No. 41H 1223599 by MGRR #1, LLC.*, (DNRC Final Order 2005).

17. An applicant must prove that at least in some years there is water physically available at the point of diversion in the amount the applicant seeks to appropriate. *In the Matter of Application for Beneficial Water Use Permit No. 72662s76G by John Fee and Don Carlson* (DNRC Final Order 1990); *In the Matter of Application for Beneficial Water Use Permit No. 85184s76F by Wills Cattle Co. and Ed McLean* (DNRC Final Order 1994).

18. The Applicant has proven that water is physically available at the proposed point of diversion in the amount Applicant seeks to appropriate. § 85-2-311(1)(a)(i), MCA. (FOF 9-14)

Legal Availability:

FINDINGS OF FACT

Groundwater

19. According to the Department's Groundwater Permit Report, 124 legal demands for groundwater exist within the identified ZOI that are completed in the source aquifer. Table 1 lists the flow rate and volume of existing active water rights within the ZOI. For groundwater certificates without an issued volume, a volume is assigned based on the usage of water.

Table 1: Existing Groundwater Rights within the Zone of Influence			
Water Right Number	Flow Rate (GPM)	Volume (AF)	Period of Diversion
42M 114757 00	16	1.63	01/01 to 12/31
42M 30124261	20	3.25	01/01 to 12/31
42M 31303 00	420	135	03/01 to 10/31
42M 16347 00	175	107	01/01 to 12/31
42M 66237 00	20	0.5	03/01 to 10/31
42M 16351 00	700	390	01/01 to 12/31
42M 30045792	11	1.83	01/01 to 12/31
42M 75812 00	28	1.5	01/01 to 12/31
42M 21977 00	20	2	01/01 to 12/31
42M 2835 00	30	3	01/01 to 12/31
42M 102775 00	30	2.5	01/01 to 12/31
42M 21976 00	20	2	01/01 to 12/31
42M 93449 00	14	1	01/01 to 12/31
42M 30050002	35	7.6	04/01 to 10/31
42M 17547 00	80	33.46	04/01 to 10/31
42M 30063226	15	1	01/01 to 12/31
42M 30021684	20	0.46	04/15 to 10/01
42M 30151791	10	1.63	04/01 to 10/31
42M 16352 00	80	47	01/01 to 12/31
42M 30017221	11	1.63	01/01 to 12/31
42M 30049988	8	0.02	01/01 to 12/31
42M 30052076	10	1	01/01 to 12/31
42M 99041 00	12	2.03	01/01 to 12/31
42M 16348 00	130	76	01/01 to 12/31

42M 79875 00	12	1.63	01/01 to 12/31
42M 163491 00	350	219	04/15 to 10/19
42M 169117 00	25	1.6	06/20 to 09/21
42M 6837 00	5	8.07	01/01 to 12/31
42M 168996 00	5	0.4	01/01 to 12/31
42M 16349 00	500	239	01/01 to 12/31
42M 2836 00	30	3.02	01/01 to 12/31
42M 30069095	25	1.23	01/01 to 12/31
42M 66159 00	15	1.5	01/01 to 12/31
42M 30148765	30	3.53	01/01 to 12/31
42M 61784 00	1500	470	01/01 to 12/31
42M 51909 00	15	1.5	01/01 to 12/31
42M 30015419	22	1.75	04/01 to 10/31
42M 30051614	15	3.25	01/01 to 12/31
42M 81327 00	12	1.63	01/01 to 12/31
42M 23843 00	25	17	01/01 to 12/31
42M 102779 00	20	4.61	01/01 to 12/31
42M 53353 00	10	1.5	01/01 to 12/31
42M 30066963	200	322	01/01 to 12/31
42M 21494 00	20	1.5	01/01 to 12/31
42M 101091 00	18	2.88	01/01 to 12/31
42M 49046 00	25	1	01/01 to 12/31
42M 89871 00	20	1.83	01/01 to 12/31
42M 27937 00	10	1.5	01/01 to 12/31
42M 30113448	12	1.5	01/01 to 12/31
42M 59514 00	15	1.5	01/01 to 12/31
42M 30105606	8	0.06	01/01 to 12/31
42M 30871 00	50	1.5	01/01 to 12/31
42M 71698 00	6	1.5	01/01 to 12/31
42M 30012334	15	3.5	01/01 to 12/31
42M 4623 00	20	1	01/01 to 12/31
42M 70184 00	10	1.5	01/01 to 12/31
42M 34346 00	20	3	01/01 to 12/31
42M 30042552	12	1.25	01/01 to 12/31
42M 30069417	30	3.4	01/01 to 12/31
42M 30028372	11	1.49	04/01 to 10/31
42M 69226 00	20	1.5	01/01 to 12/31

42M 108386 00	750	680	04/01 to 10/31
42M 13629 00	20	1.5	01/01 to 12/31
42M 30113435	15	2.07	01/01 to 12/31
42M 74093 00	12	1.5	01/01 to 12/31
42M 27403 00	10	1.5	01/01 to 12/31
42M 61831 00	10	1.5	01/01 to 12/31
42M 22541 00	15	2	01/01 to 12/31
42M 101124 00	7	1.43	01/01 to 12/31
42M 51906 00	20	0.85	01/01 to 12/31
42M 30104472	30	1.45	01/01 to 12/31
42M 169116 00	25	1.6	01/01 to 12/31
42M 4168 00	20	1	01/01 to 12/31
42M 76572 00	18	1.55	01/01 to 12/31
42M 168997 00	10	1.5	01/01 to 12/31
42M 30049734	8	0.34	01/01 to 12/31
42M 10379 00	8	1	01/01 to 12/31
42M 30047145	30	1	01/01 to 12/31
42M 30165 00	60	1	01/01 to 12/31
42M 94604 00	14	1.63	01/01 to 12/31
42M 440 00	50	37.5	01/01 to 12/31
42M 17132 00	10	2	01/01 to 12/31
42M 111352 00	5	1.63	01/01 to 12/31
42M 106940 00	15	1.63	01/01 to 12/31
42M 51913 00	5	1.5	01/01 to 12/31
42M 89885 00	24	1.25	04/01 to 10/01
42M 30071088	35	1.05	04/01 to 10/31
42M 51882 00	15	1.5	01/01 to 12/31
42M 7048 00	10	16.13	01/01 to 12/31
42M 30021326	35	2.25	01/01 to 12/31
42M 27404 00	10	1.5	01/01 to 12/31
42M 101121 00	5	0.03	01/01 to 12/31
42M 30023202	11	1.25	04/01 to 10/31
42M 22540 00	20	2	01/01 to 12/31
42M 117164 00	35	2.3	04/15 to 11/15
42M 89888 00	72	33.5	04/01 to 10/31
42M 23536 00	10	1	01/01 to 12/31
42M 17962 00	50	1.5	01/01 to 12/31

42M 30986 00	70	23.5	01/01 to 12/31
42M 61879 00	23	1.5	01/01 to 12/31
42M 51957 00	10	1.5	01/01 to 12/31
42M 163492 00	60	70	04/15 to 10/15
42M 30124262	20	1.25	04/01 to 10/31
42M 30124939	6.1	0.68	04/01 to 10/31
42M 48977 00	8	2	01/01 to 12/31
42M 1555 00	14	4.5	01/01 to 12/31
42M 30021686	28	1	01/01 to 12/31
42M 96377 00	20	2.25	01/01 to 12/31
42M 16350 00	800	463	01/01 to 12/31
42M 30124940	13.2	1.34	01/01 to 12/31
42M 86161 00	12	3.5	01/01 to 12/31
42M 22677 00	8	1.5	01/01 to 12/31
42M 35624 00	5	1	05/01 to 09/15
42M 51905 00	20	1.5	01/01 to 12/31
42M 8141 00	20	1	01/01 to 12/31
42M 28781 00	20	1.5	01/01 to 12/31
42M 30014017	12	1	01/01 to 12/31
42M 31566 00	60	7.43	01/01 to 12/31
42M 33815 00	15	1.5	01/01 to 12/31
42M 96328 00	12	1.63	01/01 to 12/31
42M 77538 00	12	2.25	01/01 to 12/31
42M 14782 00	8	1.5	01/01 to 12/31
42M 3001632*	11	2	01/01 to 12/31
42M 99126 00	15	1.63	01/01 to 12/31
Total		3,572.09	

20. The legal demands within the ZOI total 3,572 AF per year. Compared to the aquifer flux of 7,471 AF, 3,899 AF per year remain legally available to appropriate after all existing water rights have been satisfied. Table 2 compares the physical groundwater supply, current legal demands, and the Applicant's requested volume. The calculations demonstrate that groundwater is legally available for the proposed appropriation.

Table 2: Comparison of Physical Availability, Legal Availability, and Requested Volume		
Physical Availability (AF/year)	Existing Legal Demands (AF/year)	Legal Availability= Physical Availability -Existing Legal Demands (AF/year)
7,471	3,572	3,899

Legal Availability (AF/year)	Requested Appropriation (AF/year)	Legal Availability - Requested Appropriation (AF/year)
3,899	40.1	3,859

Surface Water

21. Per ARM 36.12.1704 and 36.12.1705, the Department is to determine legal availability in any hydraulically connected surface water sources in which water flow could be reduced by any amount as a result of the groundwater appropriation. The proposed well is located 3.3 miles west of the Yellowstone River. The Department has determined that the Yellowstone River is hydraulically connected to the source aquifer. The Groundwater Permit Report by DNRC Groundwater Hydrologist, Melissa Brickl, identified that surface water depletion by the proposed groundwater pumping will begin in E2 of Section 3, T22N, R59E, Richland County.

22. Depletion is projected to occur year-round. The proposed use is year-round with most of the volume consumed during the irrigation season. However, the production well is located 3.3 miles from the Yellowstone River; therefore, the timing of the net depletion would be constant year-round and equal to the consumed volume of 25.5 AF per year and a constant net depletion of 15.9 GPM. Physical and legal availability of water on the Yellowstone River in the depleted reach will be quantified.

23. According to the DNRC Groundwater Permit Report, the Applicant's proposed use would result in the irrigated grass consuming 18.2 AF each year, and county services such road maintenance, agricultural spraying and fire department consuming 7.3 AF each year. The entire consumed volume of 25.5 AF will be depleted from the Yellowstone River. Table 3 shows the

monthly breakdown of consumed volume, and the resulting depletion to Yellowstone River, by the production well:

Table 3: Consumption and Net Depletions to Yellowstone River for the Production Well Based on Proposed Purpose					
Month	Irrigation Consumed Volume (AF)	County Services Consumed Volume (AF)	Total Consumed Volume (AF)	Depletion to Yellowstone River (AF)	Depletion to Yellowstone River (CFS)
January	0.0	0.6	0.6	2.2	0.04
February	0.0	0.6	0.6	2.0	0.04
March	0.0	0.6	0.6	2.2	0.04
April	0.3	0.6	0.9	2.1	0.04
May	2.6	0.6	3.2	2.2	0.04
June	3.7	0.6	4.3	2.1	0.04
July	4.8	0.6	5.4	2.2	0.04
August	4.3	0.6	5.0	2.2	0.04
September	2.1	0.6	2.7	2.1	0.04
October	0.4	0.6	1.0	2.2	0.04
November	0.0	0.6	0.6	2.1	0.04
December	0.0	0.6	0.6	2.2	0.04
Total	18.2	7.3	25.5	25.5	

24. To determine whether the amount of water to be depleted from the Yellowstone River is legally available, the Department will first determine its physical availability where depletion is identified to begin. Legal demands in the depleted reach are then subtracted from physical availability.

Yellowstone River Physical Availability

25. USGS Gage #06329500, on the Yellowstone River near Sidney, MT, was utilized to quantify the median of mean monthly flows and volumes during the proposed period of diversion. This gage is located approximately 2.3 miles upstream of E2 Section 3, T22N, R59E, where net deletion on the River is projected to begin. The period of record for USGS Gage #06329500 is from October, 1910 to March, 2023.

26. Table 4 shows the median of mean monthly flows (CFS) at the gaging station during the year. Median of the mean monthly volumes were calculated by multiplying the median of the mean monthly flow rates in CFS by the number of days in the month by 1.98 AF/CFS/day.

Table 4: Median of the Mean Monthly Gage Data--Yellowstone River						
	January	February	March	April	May	June
Flow Rate (CFS)	5,594	6,014	9,327	9,111	17,455	40,270
Volume (AF)	343,360	333,416	572,491	541,193	1,071,388	2,392,038

	July	August	September	October	November	December
Flow Rate (CFS)	21,490	7,507	6,709	7,794	7,295	5,877
Volume (AF)	1,319,056	460,780	398,515	478,396	433,323	360,730

27. The Department has determined that surface water depletion by the proposed project will manifest in the Yellowstone River in E2 Section 3, T22N, R59E. Table 5 lists the intervening water rights between the gage and the upstream extent of the depleted reach in E2 Section 3, T22N, R59E:

Table 5: Existing Water Rights on Yellowstone River between E2 Section 3, T22N, R59E and USGS Gage #06329500 near Sidney, MT				
Water Right #	Flow (CFS)	Volume (AF)	POD Township/Range/Sec	Period of Diversion
42M 3656 00	3	118.3	22N59E9	05/01 to 09/01
42M 31493 00	8.91	2,163	22N59E9	01/01 to 12/31
42M 165230 00	65.5	47,422	22N59E9	01/01 to 12/31
42M 119268 00*	133.22	37,845	22N59E11	04/01 to 10/31
42M 119269 00*	133.22	0	22N59E11	04/01 to 10/31
42M 119271 00**	43	33.3	22N59E11	04/01 to 10/31
42M 119272 00**	43	0	22N59E11	04/01 to 10/31

* 42M 119268 00 and 42M 119269 00, held by Sidney Water Users Irrigation District, share the volume for irrigation.

** 42M 119271 00 and 42M 119272 00, held by Sidney Water Users Irrigation District, share the volume for stock use.

28. Since the gage is upstream of the location where depletion will manifest, intervening water rights are subtracted from the gage data to represent the flow rate and volume of water physically available at the start of the depleted reach:

Table 6: Yellowstone River Physical Availability -- Flow Rate (CFS)			
	Median Monthly Flow at Sidney Gage	Water Rights between Gage and Start of Depletion	Flow Rate Physically Available
January	5,594	74	5,520
February	6,014	74	5,940
March	9,327	74	9,253
April	9,111	427	8,684
May	17,455	430	17,025
June	40,270	430	39,840
July	21,490	430	21,060
August	7,507	430	7,077
September	6,709	427	6,282
October	7,794	427	7,367
November	7,295	74	7,221
December	5,877	74	5,803

Median of the mean monthly volumes were calculated by multiplying the median of the mean monthly flow rates in CFS by the number of days in the month by 1.98 AF/CFS/day:

Table 7: Yellowstone River Physical Availability -- Volume (AF)			
	Median Monthly Volume at Sidney Gage	Water Rights between Gage and Start of Depletion	Volume Physically Available
January	343,360	4,132	339,228
February	333,416	4,132	329,284
March	572,491	4,132	568,359
April	541,193	9,543	531,650

May	1,071,388	9,573	1,061,815
June	2,392,038	9,573	2,382,465
July	1,319,056	9,573	1,309,483
August	460,780	9,573	451,207
September	398,515	9,543	388,972
October	478,396	9,543	468,853
November	433,323	4,132	429,191
December	360,730	4,132	356,598

Yellowstone River Legal Availability

29. For the scope of this application, the Department identified the area of potential impact on the Yellowstone River to be within 6 miles downstream of E2 Section 3, T22N, R59E. Table 8 provides the private water users and conservation district perfected rights in the area of potential impact. In addition, when evaluating criteria for legal availability (ARM 36.12.1704 & 36.12.1705), a Montana Department of Fish, Wildlife and Parks (FWP) instream flow reservation (Water Right 40S 30017671) will also be subtracted from physically available water.

Table 8: Downstream Users on Yellowstone River in the Area of Potential Impact				
Water Right #	Flow (CFS)	Volume (AF)	POD Township/Range/Sec	Period of Diversion
42M 30051296	1.1	136	22N59E2	04/01 to 10/15
42M 104422 00	4.7	913	22N59E2	04/01 to 10/15
42M 137600 00	0.1	0.5	23N59E36	01/01 to 12/31
42M 137617 00	0.1	0.7	23N59E36	01/01 to 12/31
42M 104509 00	2.1	412	23N59E25	04/01 to 10/01
42M 114728 00	1.7	271	23N59E25	04/01 to 11/01
42M 80579 00	8.7	870	23N59E25	04/01 to 11/01
42M 119269 00*	133.2	0	23N59E25	04/01 to 10/31
42M 119268 00*	133.2	37,845	23N59E25	04/01 to 10/31
42M 119272 00**	43	0	23N59E25	04/01 to 10/31
42M 119271 00**	43	33.3	23N59E25	04/01 to 10/31
42M 80579 00	8.7	870	23N59E24	04/01 to 11/01
42M 137604 00	0.1	0.7	23N59E13	01/01 to 12/31
42M 137605 00	0.1	0.2	23N60E18	01/01 to 12/31

* 42M 119268 00 and 42M 119269 00, held by Sidney Water Users Irrigation District, share the volume for irrigation.
 ** 42M 119271 00 and 42M 119272 00, held by Sidney Water Users Irrigation District, share the volume for stock use.

Table 9: Yellowstone River Legal Availability --Flow Rate (CFS)				
	Flow Rate Physically Available	Downstream Users Water Rights	FWP Instream Right	Flow Rate Legally Available
January	5,520	0.4	3,738	1,782
February	5,940	0.4	4,327	1,613
March	9,253	0.4	6,778	2,475
April	8,684	379.8	6,808	1,496
May	17,025	379.8	11,964	4,681
June	39,840	379.8	25,140	14,320
July	21,060	379.8	10,526	10,154
August	7,077	379.8	2,670	4,027
September	6,282	379.8	3,276	2,626
October	7,367	377.7	6,008	981
November	7,221	0.4	5,848	1,373
December	5,803	0.4	3,998	1,805

Table 10: Yellowstone River Legal Availability --Volume (AF)				
	Volume Physically Available	Downstream Users Water Rights	FWP Instream Right	Volume Legally Available
January	339,228	0.2	229,831	109,397
February	329,284	0.2	240,281	89,003
March	568,359	0.2	416,711	151,648
April	531,650	5,917	405,031	120,702
May	1,061,815	5,917	735,528	320,370
June	2,382,465	5,917	1,495,644	880,904
July	1,309,483	5,917	647,090	656,476
August	451,207	5,917	164,166	281,124
September	388,972	5,917	194,917	188,138
October	468,853	5,848	369,377	93,628
November	429,191	0.2	347,920	81,271
December	356,598	0.2	245,814	110,784

30. The proposed permit requests to divert 40.1 AF per year, of which 32.7 AF is for irrigating grass fields and 7.4 AF for road maintenance, agricultural spraying, and fire department services year-round. The county services are assumed to be 100% consumptive. Refer to Table 3 which summarizes the calculated consumption and modeled monthly depletions to the Yellowstone River. Tables 11 and 12 below show remaining availability on the Yellowstone River after the predicted monthly depletion:

Table 11: Yellowstone River After Depletion -- Flow Rate (CFS)			
	Legal Availability	Depletion	After Depletion
January	1,782	0.04	1,782
February	1,613	0.04	1,613
March	2,475	0.04	2,475
April	1,496	0.04	1,496
May	4,681	0.04	4,681
June	14,320	0.04	14,320
July	10,154	0.04	10,154
August	4,027	0.04	4,027
September	2,626	0.04	2,626
October	981	0.04	981
November	1,373	0.04	1,373
December	1,805	0.04	1,805

Table 12: Yellowstone River After Depletion -- Volume (AF)			
	Legal Availability	Depletion	After Depletion
January	109,397	2.2	109,395
February	89,003	2.0	89,001
March	151,648	2.2	151,646
April	120,702	2.1	120,700
May	320,370	2.2	320,368

June	880,904	2.1	880,902
July	656,476	2.2	656,474
August	281,124	2.2	281,122
September	188,138	2.1	188,136
October	93,628	2.2	93,626
November	81,271	2.1	81,269
December	110,784	2.2	110,782

31. The Department finds the amount of groundwater requested for the proposed appropriation, and net depletions identified for the Yellowstone River, to be legally available.

CONCLUSIONS OF LAW

32. Pursuant to § 85-2-311(1)(a), MCA, an applicant must prove by a preponderance of the evidence that:

(ii) water can reasonably be considered legally available during the period in which the applicant seeks to appropriate, in the amount requested, based on the records of the department and other evidence provided to the department. Legal availability is determined using an analysis involving the following factors:

- (A) identification of physical water availability;
- (B) identification of existing legal demands on the source of supply throughout the area of potential impact by the proposed use; and
- (C) analysis of the evidence on physical water availability and the existing legal demands, including but not limited to a comparison of the physical water supply at the proposed point of diversion with the existing legal demands on the supply of water.

E.g., ARM 36.12.101 and 36.12.120; Montana Power Co., 211 Mont. 91, 685 P.2d 336 (Permit granted to include only early irrigation season because no water legally available in late irrigation season); *In the Matter of Application for Beneficial Water Use Permit No. 81705-g76F by Hanson* (DNRC Final Order 1992).

33. It is the applicant's burden to present evidence to prove water can be reasonably considered legally available. Sitz Ranch v. DNRC, DV-10-13390, Fifth Judicial District Court, *Order Affirming DNRC Decision*, (2011) Pg. 7 (the legislature set out the criteria (§ 85-2-311, MCA) and placed the burden of proof squarely on the applicant. The Supreme Court has instructed that

those burdens are exacting.); see also Matter of Application for Change of Appropriation Water Rights Nos. 101960-41S and 101967-41S by Royston (1991), 249 Mont. 425, 816 P.2d 1054 (burden of proof on applicant in a change proceeding to prove required criteria); *In the Matter of Application to Change Water Right No. 41H 1223599 by MGRR #1, LLC.*, (DNRC Final Order 2005))(it is the applicant's burden to produce the required evidence.); *In the Matter of Application for Beneficial Water Use Permit No. 41H 30023457 by Utility Solutions, LLC* (DNRC Final Order 2007)(permit denied for failure to prove legal availability); see also ARM 36.12.1705.

34. Pursuant to Montana Trout Unlimited v. DNRC, 2006 MT 72, 331 Mont. 483, 133 P.3d 224, the Department recognizes the connectivity between surface water and ground water and the effect of pre-stream capture on surface water. E.g., Wesmont Developers v. DNRC, CDV-2009-823, Montana First Judicial District Court, *Memorandum and Order*, (2011) Pgs. 7-8; *In the Matter of Beneficial Water Use Permit Nos. 41H 30012025 and 41H 30013629 by Utility Solutions LLC* (DNRC Final Order 2006)(mitigation of depletion required), *affirmed*, Faust v. DNRC et al., Cause No. CDV-2006-886, Montana First Judicial District (2008); see also Robert and Marlene Takle v. DNRC et al., Cause No. DV-92-323, Montana Fourth Judicial District for Ravalli County, *Opinion and Order* (June 23, 1994) (affirming DNRC denial of Applications for Beneficial Water Use Permit Nos. 76691-76H, 72842-76H, 76692-76H and 76070-76H; underground tributary flow cannot be taken to the detriment of other appropriators including surface appropriators and ground water appropriators must prove unappropriated surface water, *citing* Smith v. Duff, 39 Mont. 382, 102 P. 984 (1909), and Perkins v. Kramer, 148 Mont. 355, 423 P.2d 587 (1966)); *In the Matter of Beneficial Water Use Permit No. 80175-s76H by Tintzman* (DNRC Final Order 1993)(prior appropriators on a stream gain right to natural flows of all tributaries in so far as may be necessary to afford the amount of water to which they are entitled, *citing* Loyning v. Rankin (1946), 118 Mont. 235, 165 P.2d 1006; Granite Ditch Co. v. Anderson (1983), 204 Mont. 10, 662 P.2d 1312; Beaverhead Canal Co. v. Dillon Electric Light & Power Co. (1906), 34 Mont. 135, 85 P. 880); *In the Matter of Beneficial Water Use Permit No. 63997-42M by Joseph F. Crisafulli* (DNRC Final Order 1990)(since there is a relationship between surface flows and the ground water source proposed for appropriation, and since

diversion by applicant's well appears to influence surface flows, the ranking of the proposed appropriation in priority must be as against all rights to surface water as well as against all groundwater rights in the drainage.) Because the applicant bears the burden of proof as to legal availability, the applicant must prove that the proposed appropriation will not result in prestream capture or induced infiltration and cannot limit its analysis to ground water. § 85-2-311(a)(ii), MCA. Absent such proof, the applicant must analyze the legal availability of surface water in light of the proposed ground water appropriation. *In the Matter of Application for Beneficial Water Use Permit No. 41H 30023457 By Utility Solutions LLC* (DNRC Final Order 2007) (permit denied); *In the Matter of Application for Beneficial Water Use Permit No. 76H-30028713 by Patricia Skergan and Jim Helmer* (DNRC Final Order 2009); Sitz Ranch v. DNRC, DV-10-13390, Fifth Judicial District Court, *Order Affirming DNRC Decision*, (2011) Pg. 5 ; Wesmont Developers v. DNRC, CDV-2009-823, First Judicial District Court, *Memorandum and Order*, (2011) Pgs. 11-12.

35. Where a proposed ground water appropriation depletes surface water, applicant must prove legal availability of amount of depletion of surface water throughout the period of diversion either through a mitigation /aquifer recharge plan to offset depletions or by analysis of the legal demands on, and availability of, water in the surface water source. Robert and Marlene Takle v. DNRC et al., Cause No. DV-92-323, Montana Fourth Judicial District for Ravalli County, *Opinion and Order* (June 23, 1994); *In the Matter of Beneficial Water Use Permit Nos. 41H 30012025 and 41H 30013629 by Utility Solutions LLC* (DNRC Final Order 2006)(permits granted), *affirmed*, Faust v. DNRC et al., Cause No. CDV-2006-886, Montana First Judicial District (2008); *In the Matter of Application for Beneficial Water Use Permit 41H 30019215 by Utility Solutions LLC* (DNRC Final Order 2007)(permit granted), *affirmed*, Montana River Action Network et al. v. DNRC et al., Cause No. CDV-2007-602, Montana First Judicial District (2008); *In the Matter of Application for Beneficial Water Use Permit No. 41H 30023457 by Utility Solutions LLC* (DNRC Final Order 2007) (permit denied for failure to analyze legal availability outside of irrigation season (where mitigation applied)); *In the Matter of Application for Beneficial Water Use Permit No. 41H 30026244 by Utility Solutions LLC* (DNRC Final Order 2008); *In the Matter of Application for Beneficial Water Use Permit No. 76H-30028713 by*

Patricia Skergan and Jim Helmer (DNRC Final Order 2009)(permit denied in part for failure to analyze legal availability for surface water depletion); Sitz Ranch v. DNRC, DV-10-13390, Fifth Judicial District Court, *Order Affirming DNRC Decision*, (2011) Pg. 5 (Court affirmed denial of permit in part for failure to prove legal availability of stream depletion to slough and Beaverhead River); Wesmont Developers v. DNRC, CDV-2009-823, First Judicial District Court, *Memorandum and Order*, (2011) Pgs. 11-12 (“DNRC properly determined that Wesmont cannot be authorized to divert, either directly or indirectly, 205.09 acre-feet from the Bitterroot River without establishing that the water does not belong to a senior appropriator”; applicant failed to analyze legal availability of surface water where projected surface water depletion from groundwater pumping); *In the Matter of Application for Beneficial Water Use Permit No. 76D-30045578 by GBCI Other Real Estate, LLC* (DNRC Final Order 2011) (in an open basin, applicant for a new water right can show legal availability by using a mitigation/aquifer recharge plan or by showing that any depletion to surface water by groundwater pumping will not take water already appropriated; development next to Lake Koocanusa will not take previously appropriated water). Applicant may use water right claims of potentially affected appropriators as a substitute for “historic beneficial use” in analyzing legal availability of surface water under § 85-2-360(5), MCA. Royston, *supra*.

36. In analyzing legal availability for surface water, applicant was required to evaluate legal demands on the source of supply throughout the “area of potential impact” by the proposed use under §85-2-311(1)(a)(ii), MCA, not just within the “zone of influence.” Sitz Ranch v. DNRC, DV-10-13390, Fifth Judicial District Court, *Order Affirming DNRC Decision*, (2011) Pg. 6.

37. Use of published upstream gauge data minus rights of record between gauge and point of diversion adjusted to remove possible duplicated rights shows water physically available. Using same methodology and adding rights of record downstream of point of diversion to the mouth of the stream shows water legally available. *In the Matter of Application for Beneficial Water Use Permit No. 41P-105759 by Sunny Brook Colony* (DNRC Final Order 2001); *In the Matter of Application for Beneficial Water Use Permit No. 81705-g76F by Hanson* (DNRC Final Order 1992)

38. Applicant has proven by a preponderance of the evidence that water can reasonably be considered legally available during the period in which the Applicant seeks to appropriate, in the amount requested, based on the records of the Department and other evidence provided to the Department. § 85-2-311(1)(a)(ii), MCA. (FOF 19-31)

Adverse Effect

FINDINGS OF FACT

39. Water is physically and legally available for both groundwater and hydraulically connected surface waters in all months of the proposed period of diversion. The Applicant will install a Seametrics flow meter on the well to monitor the flow rate and prevent appropriation of water over the requested amount.

40. The drawdown in existing SHU wells was modeled under the proposed conditions using the following inputs: Theis (1935) solution, $T = 7,357 \text{ ft}^2/\text{day}$, $S_y = 0.1$ (Lohman, 1972). After pumping for five years, the maximum modeled drawdown is 0.38 ft at the end of the fifth year. No water right is predicted to experience drawdown equal to or greater than one foot.

41. If a valid call is made on the water, the Applicant will make the necessary adjustments, including cessation of diversion, to ensure that senior water rights are satisfied.

42. The Department finds there will be no adverse effect because the amount of water requested is legally available and the Applicant's plan to curtail appropriation during times of water shortage is adequate.

CONCLUSIONS OF LAW

43. Pursuant to § 85-2-311(1)(b), MCA, the Applicant bears the affirmative burden of proving by a preponderance of the evidence that the water rights of a prior appropriator under an existing water right, a certificate, a permit, or a state water reservation will not be adversely affected. Analysis of adverse effect must be determined based on a consideration of an applicant's plan for the exercise of the permit that demonstrates that the applicant's use of the water will be controlled so the water right of a prior appropriator will be satisfied. See Montana Power Co.

(1984), 211 Mont. 91, 685 P.2d 336 (purpose of the Water Use Act is to protect senior appropriators from encroachment by junior users); Bostwick Properties, Inc. ¶ 21.

44. An applicant must analyze the full area of potential impact under the § 85-2-311, MCA criteria. *In the Matter of Beneficial Water Use Permit No. 76N-30010429 by Thompson River Lumber Company* (DNRC Final Order 2006). While § 85-2-361, MCA, limits the boundaries expressly required for compliance with the hydrogeologic assessment requirement, an applicant is required to analyze the full area of potential impact for adverse effect in addition to the requirement of a hydrogeologic assessment. Id. ARM 36.12.120(5).

45. Applicant must prove that no prior appropriator will be adversely affected, not just the objectors. Sitz Ranch v. DNRC, DV-10-13390, Fifth Judicial District Court, *Order Affirming DNRC Decision*, (2011) Pg. 4.

46. In analyzing adverse effect to other appropriators, an applicant may use the water rights claims of potentially affected appropriators as evidence of their “historic beneficial use.” See Matter of Application for Change of Appropriation Water Rights Nos. 101960-41S and 101967-41S by Royston (1991), 249 Mont. 425, 816 P.2d 1054.

47. It is the applicant’s burden to produce the required evidence. E.g., Sitz Ranch v. DNRC, DV-10-13390, Fifth Judicial District Court, *Order Affirming DNRC Decision*, (2011) Pg. 7 (legislature has placed the burden of proof squarely on the applicant); *In the Matter of Application to Change Water Right No. 41H 1223599 by MGRR #1, LLC.*, (DNRC Final Order 2005). (DNRC Final Order 2005). The Department is required to grant a permit only if the § 85-2-311, MCA, criteria are proven by the applicant by a preponderance of the evidence. Bostwick Properties, Inc. ¶ 21.

48. Section 85-2-311 (1)(b) of the Water Use Act does not contemplate a de minimis level of adverse effect on prior appropriators. Wesmont Developers v. DNRC, CDV-2009-823, First Judicial District Court, *Memorandum and Order*, (2011) Pg. 8.

49. The Applicant has proven by a preponderance of the evidence that the water rights of a prior appropriator under an existing water right, a certificate, a permit, or a state water reservation will not be adversely affected. § 85-2-311(1)(b), MCA. (FOF 39-42)

Adequate Diversion

FINDINGS OF FACT

50. The well was pump tested by Interstate Engineering, Inc for 72 hours in order to meet the requirements of ARM 36.12.121. During the test, discharge rate varied between 278 to 252 GPM and was maintained above the proposed pumping rate of 250 GPM. Interstate Engineering also assisted the Applicant with the design of diversion and conveyance structures.

51. Water will be diverted by an 8-inch well 120 feet deep, with a static water level at 26.1 feet. The well is equipped with a Grundfos 300S300-8 8-stage submersible pump with 30hp electric motor, powered by a variable frequency drive panel, to operate at 250 GPM.

52. Leaving the well is a 4-inch steel line with a Seametrics AG-90 Magmeter installed to measure the total flow and flow rate out of the well. From there, water will be conveyed by two separate means.

53. A 3-inch steel line on the west side of the well will be equipped with a 3-inch butterfly valve and a flow meter, and run above-ground to two 440-barrel water tanks adjacent to the well. At the rate of 250 GPM, the two tanks will fill up in 2.5 hours. The tanks are used to supply water trucks and trailers by Richland County weed district, road maintenance crew, the volunteer fire department, and for other various county needs. The tanks will be equipped with a float system to prevent overflow. This diversion system is set up to fill tanks during daytime to serve the county operations.

54. A 4-inch steel line on the east side of the well will be equipped with a 4-inch butterfly valve, then head northeast 520 feet in a 6-inch PVC pipe underground to irrigate 10 acres of grass fields at the Fairground. The irrigation system will operate at night. A sprinkler control box will be installed at the end of the 520-ft pipe. From there, a 3-inch main line will deliver water to each of the 6 zones along with control wiring. Zones 1-5 will be automated such that one zone runs per night, and each zone will irrigate once per week. A 1.5-inch secondary line will be added at the east end of the Fairground to supply water to Zone 6. Zone 6 consists of small patches which can be irrigated during the day with garden hoses and sprinklers managed by the Fairground staff.

55. The irrigation structure and the storage tanks will run independently and separately, each at a maximum flow rate of 250 GPM. The system will be set up to run irrigation at night and fill tanks during the day. During freezing conditions, the system will be drained and winterized.
56. The City of Sidney currently provides municipal water for these county services. It will be replaced by the proposed appropriation once this new system is in place.
57. The Department finds the diversion means and operation adequate for the proposed project.

CONCLUSIONS OF LAW

58. Pursuant to § 85-2-311(1)(c), MCA, an Applicant must demonstrate that the proposed means of diversion, construction, and operation of the appropriation works are adequate.
59. The adequate means of diversion statutory test merely codifies and encapsulates the case law notion of appropriation to the effect that the means of diversion must be reasonably effective, i.e., must not result in a waste of the resource. *In the Matter of Application for Beneficial Water Use Permit No. 33983s41Q by Hoyt* (DNRC Final Order 1981); § 85-2-312(1)(a), MCA.
60. Applicant has proven by a preponderance of the evidence that the proposed means of diversion, construction, and operation of the appropriation works are adequate for the proposed beneficial use. § 85-2-311(1)(c), MCA (FOF 50-57).

Beneficial Use

FINDINGS OF FACT

61. The beneficial use of the requested water is year-round municipal purpose. The place of use is the Richland County Fairground, where water will be used to irrigate the grass fields and to fill up county and fire department vehicles.
62. The Applicant proposes to water 10 acres of grass fields by diverting groundwater at 250 GPM for a maximum of 32.7 AF, generally from April 1 to October 31. Irrigation is scheduled for 1 to 1.5 inches per acre per week at night during the growing season.

63. The proposed appropriation also benefits public services provided by Richland County such as road maintenance, agricultural spraying, and the volunteer fire department. The Applicant estimated that a maximum of 200,000 gallons per month year-round, or 7.4 AF per year, is sufficient for the various county needs. Specifically, the uses are approximately 4.5 AF for road maintenance, 1.9 AF for volunteer fire department, and 1 AF for agricultural spraying, calculated based on vehicle capacity, size of the county, and application frequency. The weed district fills 300-gallon tanks on pickups; the road department has 130- and 150-barrel water trailers, and two 4,000-gallon tankers. The fire department has 300-gallon tanks, 500-gallon tanks, 1,000-gallon tanks, and a 3,500-gallon tanker. Road maintenance and agricultural spraying will generally take place between March 1 and November 30. The fire department may use the water year-round.
64. Groundwater certificate 42M 34346 is an existing water right with the Fairground as the place of use. It was developed by the Richland County Fairgrounds with a July 13, 1981 priority date for Fairground use. This groundwater system was later replaced by the City of Sidney water.
65. Department finds the beneficial use reasonable for the proposed project.

CONCLUSIONS OF LAW

66. Under § 85-2-311(1)(d), MCA, an Applicant must prove by a preponderance of the evidence the proposed use is a beneficial use.
67. An appropriator may appropriate water only for a beneficial use. See also, § 85-2-301 MCA. It is a fundamental premise of Montana water law that beneficial use is the basis, measure, and limit of the use. E.g., McDonald, supra; Toohey v. Campbell (1900), 24 Mont. 13, 60 P. 396. The amount of water under a water right is limited to the amount of water necessary to sustain the beneficial use. E.g., Bitterroot River Protective Association v. Siebel, Order on Petition for Judicial Review, Cause No. BDV-2002-519, Montana First Judicial District Court, Lewis and Clark County (2003), *affirmed on other grounds*, 2005 MT 60, 326 Mont. 241, 108 P.3d 518; *In The Matter Of Application For Beneficial Water Use Permit No. 43C 30007297 by Dee Deaterly* (DNRC Final Order), *affirmed other grounds*, Dee Deaterly v. DNRC et al, Cause

No. 2007-186, Montana First Judicial District, *Order Nunc Pro Tunc on Petition for Judicial Review* (2009); Worden v. Alexander (1939), 108 Mont. 208, 90 P.2d 160; Allen v. Petrick (1924), 69 Mont. 373, 222 P. 451; *In the Matter of Application for Beneficial Water Use Permit No. 41S-105823 by French* (DNRC Final Order 2000).

68. Amount of water to be diverted must be shown precisely. Sitz Ranch v. DNRC, DV-10-13390, Fifth Judicial District Court, *Order Affirming DNRC Decision*, (2011) Pg. 3 (citing BRPA v. Siebel, 2005 MT 60, and rejecting applicant's argument that it be allowed to appropriate 800 acre-feet when a typical year would require 200-300 acre-feet).

69. It is the applicant's burden to produce the required evidence. Sitz Ranch v. DNRC, DV-10-13390, Fifth Judicial District Court, *Order Affirming DNRC Decision*, (2011) Pg. 7; *In the Matter of Application to Change Water Right No. 41H 1223599 by MGRR #1, LLC.*, (DNRC Final Order 2005); see also Royston; Ciotti.

70. Applicant proposes to use water for municipal use which is a recognized beneficial use. § 85-2-102(5), MCA. Applicant has proven by a preponderance of the evidence that municipal use is a beneficial use and that 40.1 AF of diverted volume and 250 GPM of water requested is the amount needed to sustain the beneficial use. § 85-2-311(1)(d), MCA. (FOF 61-65)

Possessory Interest

FINDINGS OF FACT

71. This application is a municipal use application in which water is supplied to another. It is clear that the ultimate user will not accept the supply without consenting to the use of the water. The Applicant has possessory interest in the property where the water is to be put to beneficial use or has the written consent of the person having the possessory interest.

CONCLUSIONS OF LAW

72. Pursuant to § 85-2-311(1)(e), MCA, an Applicant must prove by a preponderance of the evidence that it has a possessory interest or the written consent of the person with the possessory interest in the property where the water is to be put to beneficial use, or if the proposed use has a point of diversion, conveyance, or place of use on national forest system lands, the applicant has

any written special use authorization required by federal law to occupy, use, or traverse national forest system lands for the purpose of diversion, impoundment, storage, transportation, withdrawal, use, or distribution of water under the permit.

73. Pursuant to ARM 36.12.1802:

(1) An applicant or a representative shall sign the application affidavit to affirm the following:

(a) the statements on the application and all information submitted with the application are true and correct and

(b) except in cases of an instream flow application, or where the application is for sale, rental, distribution, or is a municipal use, or in any other context in which water is being supplied to another and it is clear that the ultimate user will not accept the supply without consenting to the use of water on the user's place of use, the applicant has possessory interest in the property where the water is to be put to beneficial use or has the written consent of the person having the possessory interest.

(2) If a representative of the applicant signs the application form affidavit, the representative shall state the relationship of the representative to the applicant on the form, such as president of the corporation, and provide documentation that establishes the authority of the representative to sign the application, such as a copy of a power of attorney.

(3) The department may require a copy of the written consent of the person having the possessory interest.

74. The Applicant has proven by a preponderance of the evidence that it has a possessory interest, or the written consent of the person with the possessory interest, in the property where the water is to be put to beneficial use. § 85-2-311(1)(e), MCA. (FOF 71)

PRELIMINARY DETERMINATION

Subject to the terms, analysis, and conditions in this Order, the Department preliminarily determines that this Application for Beneficial Water Use Permit No. 42M 30159885 should be GRANTED.

The Department determines the Applicant may divert groundwater, by means of a well 120 feet deep, from January 1 to December 31, at 250 GPM up to 40.1 AF, from a point in NWSWNW Section 32, T23N, R59E, Richland County, for municipal use from January 1 to

December 31. The municipal use includes services such as county road maintenance, agricultural spraying, and the volunteer fire department, as well as irrigation on 10 acres of grass fields at the Richland County Fairground in NW Section 32, T23N, R59E.

NOTICE

This Department will provide public notice of this Application and the Department's Preliminary Determination to Grant pursuant to §§ 85-2-307, MCA. The Department will set a deadline for objections to this Application pursuant to §§ 85-2-307, and -308, MCA. If this Application receives no valid objection or all valid objections are unconditionally withdrawn, the Department will grant this Application as herein approved. If this Application receives a valid objection, the application and objection will proceed to a contested case proceeding pursuant to Title 2 Chapter 4 Part 6, MCA, and § 85-2-309, MCA. If valid objections to an application are received and withdrawn with stipulated conditions and the department preliminarily determined to grant the permit or change in appropriation right, the department will grant the permit or change subject to conditions necessary to satisfy applicable criteria.

DATED this 29th day of August, 2023.

/Original Signed by Todd Netto/

Todd Netto, Manager

Glasgow Regional Office

Department of Natural Resources and Conservation

CERTIFICATE OF SERVICE

This certifies that a true and correct copy of the PRELIMINARY DETERMINATION TO GRANT was served upon all parties listed below on this 5th day of September, 2023, by first class United States mail.

ADAM SMITH
2140 WEST HOLLY ST
SIDNEY, MT 59270

RYAN KOPP
2177 LINCOLN AVE SE
SIDNEY, MT 59270

NAME

DATE